**Unity3D教程：学习Socket(二)**

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[Unity3D教程：学习Socket(一)](http://www.unitymanual.com/7718.html)

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| --- | --- |
| 001 | **using** UnityEngine; |
| 002 | **using** System.Collections; |
| 003 | **using** System.Net.Sockets; |
| 004 | **using** System.Net; |
| 005 | **using** System; |
| 006 | **using** System.Text; |
| 007 | **using** System.Threading; |
| 008 |  |
| 009 | **public** **class** TestAsyncSocketClient2 : MonoBehaviour |
| 010 | { |
| 011 | **private** Socket client = **null**; |
| 012 | **private** **string** ip = "127.0.0.1"; |
| 013 | **private** **int** port = 8989; |
| 014 |  |
| 015 | **private** **int** size = 1024; |
| 016 | **private** **byte**[] readData = new **byte**[1024]; |
| 017 | **private** **byte**[] data = new **byte**[1024]; |
| 018 | **void** Start() |
| 019 | { *//Unity3D教程手册：www.unitymanual.com* |
| 020 |  |
| 021 | *// socket2.SetSocketOption(SocketOptionLevel.Socket, SocketOptionName.ReuseAddress, true); 多socket 复用同一端口* |
| 022 | client = new Socket(AddressFamily.InterNetwork, SocketType.Stream, ProtocolType.Tcp); |
| 023 | IPEndPoint address = new IPEndPoint(IPAddress.Parse(ip), port); |
| 024 | *//client.Blocking = false;* |
| 025 | client.BeginConnect(address, new AsyncCallback(Connected), **null**); *//建立异步连接服务 , Connected 进行监听* |
| 026 | *//connectDone.WaitOne();* |
| 027 | } |
| 028 | **void** Connected(IAsyncResult iar) *//建立连接* |
| 029 | { |
| 030 | *//Socket client = (Socket)iar.AsyncState;* |
| 031 | client.EndConnect(iar); |
| 032 | *//client.BeginReceive(data, 0, size, SocketFlags.None, new AsyncCallback(ReceiveData), client);* |
| 033 | echo("建立连接"); |
| 034 |  |
| 035 | } |
| 036 | **void** Send(**string** str) |
| 037 | { |
| 038 | **byte**[] msg = Encoding.UTF8.GetBytes(str); |
| 039 | client.BeginSend(msg, 0, msg.Length, SocketFlags.None, new AsyncCallback(SendData), client); *//开始发送* |
| 040 | } |
| 041 | **void** SendData(IAsyncResult iar) *//发送数据* |
| 042 | { *//Unity3D教程手册：www.unitymanual.com* |
| 043 | Socket remote = (Socket)iar.AsyncState; |
| 044 | **int** sent = remote.EndSend(iar); *//关闭发送* |
| 045 | remote.BeginReceive(data, 0, data.Length, SocketFlags.None, new AsyncCallback(ReceiveData), remote); *//开始接收* |
| 046 | } |
| 047 |  |
| 048 |  |
| 049 |  |
| 050 | **void** Update() |
| 051 | { |
| 052 | startReceive(); *//这步很重要，，，不然会收不到服务器发过来的消息* |
| 053 | } |
| 054 | **bool** ReceiveFlag = **true**; |
| 055 | **void** startReceive() |
| 056 | { |
| 057 | **if** (ReceiveFlag) { |
| 058 | ReceiveFlag = **false**; |
| 059 | client.BeginReceive(readData, 0, readData.Length, SocketFlags.None, new AsyncCallback(endReceive), client); |
| 060 | } |
| 061 | } |
| 062 |  |
| 063 | **void** endReceive(IAsyncResult iar) *//接收数据* |
| 064 | { |
| 065 | ReceiveFlag = **true**; |
| 066 | Socket remote = (Socket)iar.AsyncState; |
| 067 | **int** recv = remote.EndReceive(iar); |
| 068 | **if** (recv > 0) |
| 069 | { |
| 070 | **string** stringData = Encoding.UTF8.GetString(readData, 0, recv); |
| 071 | text2 += "**\n**" + "接收服务器数据:+++++++++++++++" + stringData; |
| 072 | } |
| 073 |  |
| 074 | } |
| 075 | **void** ReceiveData(IAsyncResult iar) *//接收数据* |
| 076 | { |
| 077 | Socket remote = (Socket)iar.AsyncState; |
| 078 | **int** recv = remote.EndReceive(iar); *//关闭接收 注意：如果关闭了接收，就不能接收了 测试是这样* |
| 079 |  |
| 080 | **string** stringData = Encoding.UTF8.GetString(data, 0, recv); |
| 081 | text2 += "**\n**" + "回收发送数据:+++++++++++++++" + stringData; |
| 082 |  |
| 083 | } |
| 084 |  |
| 085 |  |
| 086 | **void** CloseSocket() *//关闭socket* |
| 087 | { |
| 088 | **if** (client.Connected) |
| 089 | { |
| 090 | echo("关闭socket"); |
| 091 | client.Close(); |
| 092 | } |
| 093 | } |
| 094 | **void** OnApplicationQuit() |
| 095 | { |
| 096 | CloseSocket(); |
| 097 | } |
| 098 |  |
| 099 | **void** echo(**object** msg) |
| 100 | { |
| 101 | Debug.Log(msg); |
| 102 | } |
| 103 |  |
| 104 | **string** text = ""; |
| 105 | **string** text2 = ""; |
| 106 | Vector2 p = new Vector2(600, 300); |
| 107 | **void** OnGUI() |
| 108 | { |
| 109 | GUILayout.BeginVertical(GUILayout.Width(500) ); |
| 110 | text = GUILayout.TextField(text); |
| 111 | **if** (GUILayout.Button("发送数据")) |
| 112 | { |
| 113 | Send(text); |
| 114 | } |
| 115 | GUILayout.BeginScrollView(p); |
| 116 | text2 = GUILayout.TextArea(text2, GUILayout.Height(300)); |
| 117 | GUILayout.EndScrollView(); |
| 118 | GUILayout.EndVertical(); |
| 119 |  |
| 120 | } |
| 121 |  |
| 122 | } |